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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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FILE 'BIOSIS' ENTERED AT 12:11:16 ON 24 JUN 2004 COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 12:11:16 ON 24 JUN 2004

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           114 (PCTAIRE PROTEIN KINASE 1) OR PTCK1 OR CRK5 OR (PCTAIRE 1)
=> s antisense or (anti (n) sense) or (complement? (2n) ( oligonucl? or nucleo?))
        137553 ANTISENSE OR (ANTI (N) SENSE) OR (COMPLEMENT? (2N) (OLIGONUCL?
              OR NUCLEO?))
=> s antisense or (anti (n) sense) or (complement? (2n)( oligonucl? or nucle?))
        140169 ANTISENSE OR (ANTI (N) SENSE) OR (COMPLEMENT? (2N) (OLIGONUCL?
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T.4
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The L-number entered has not been defined in this session, or it
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PROCESSING COMPLETED FOR L4
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=> d 15 1-4 ibib abs
    ANSWER 1 OF 4 CA COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         139:47198 CA
TITLE:
                         Use of antisense oligonucleotides to PCTAIRE
                         protein kinase isoenzyme 1 cDNA in treatment of
                         hyperproliferative and neurological diseases
INVENTOR(S):
                         Freier, Susan M.; Roach, Mark P.
PATENT ASSIGNEE(S):
                         Isis Pharmaceuticals, Inc., USA
SOURCE:
                         PCT Int. Appl., 104 pp.
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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                 KIND DATE
                                          APPLICATION NO. DATE
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    WO 2003049691 A2
                           20030619
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MR, NE, SN, TD, TG

US 2003138952 A1 20030724 US 2001-17621 20011207 PRIORITY APPLN. INFO.: US 2001-17621 A 20011207

Antisense compds., compns. and methods are provided for modulating the expression of PCTAIRE protein kinase isoenzyme 1. The compns. comprise antisense compds., particularly antisense oligonucleotides, targeted to nucleic acids encoding PCTAIRE protein kinase isoenzyme 1. Methods of using these compds. for modulation of PCTAIRE protein kinase isoenzyme 1 expression and for treatment of diseases are provided.

L5 ANSWER 2 OF 4 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

134:337386 CA

TITLE:

Glutamate transporter associated proteins regulating glutamate transport, cytoskeletal organization and

chloride flux

INVENTOR (S):

Rothstein, Jeffrey D.; Jackson, Mandy; Lin, Glen; Law,

Robert; Orlov, Irina

PATENT ASSIGNEE(S): SOURCE:

Johns Hopkins University School of Medicine, USA

PCT Int. Appl., 116 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
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    WO 2001030968 A2 20010503
WO 2001030968 A3 20020808
                                          WO 2000-US29431 20001023
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            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
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    AU 2001011037
                    A5 20010508
                                        AU 2001-11037
                                                           20001023
PRIORITY APPLN. INFO.:
                                       US 1999-161007P P 19991023
                                       US 2000-206157P P 20000522
WO 2000-US29431 W 20001023
```

AΒ Glutamate transporter-associated proteins (GTRAP) and cDNAs encoding them are provided. Also provided is a method for identifying a compound that modulates a cellular response mediated by a GTRAP. A method is further provided for identifying a compound that inhibits an interaction between a GTRAP and a glutamate transporter protein. A method is provided for treating a disorder associated with glutamate transport. The proteins were first identified as interacting with the EAAC1 glutamate transporter in a yeast two-hybrid system. Full-length cDNAs encoding three different GTRAPs (3-18, 4-41, and 4-48) were obtained. Each of these proteins bound a different glutamate transporter and the transporter-binding domains are identified. Tissue distribution of the GTRAPs mirrored the pattern of distribution of their cognate transporters. GTRAP3-18 was distributed in a number of major organs while 4-41 and 4-48 were localized to the brain. Antisense DNAs from the GTRAP3-18 blocked synthesis of the protein in rats. Synthesis of GTRAP3-18 was also inhibited by retinoic acid.

```
L5 ANSWER 3 OF 4 CA COPYRIGHT 2004 ACS on STN
```

ACCESSION NUMBER:

TITLE:

134:339179 CA

Nucleic acids and proteins associated with cancer as

antitumor targets

INVENTOR(S): Burmer, Glenna C.; Brown, Joseph P.; Pritchard, David

PATENT ASSIGNEE(S):

Lifespan Biosciences, Inc., USA

SOURCE:

PCT Int. Appl., 98 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                    KIND DATE
                                      APPLICATION NO. DATE
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                                       ______
    WO 2001030964 A2
                         20010503
                                        WO 2000-US29126 20001020
                    A3 20010809
    WO 2001030964
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            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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           DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
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    AU 2001013397
                   A5 20010508
                                       AU 2001-13397
                                                       20001020
PRIORITY APPLN. INFO.:
                                     US 1999-161232P P 19991022
                                     US 2000-693783 A 20001019
                                     WO 2000-US29126 W 20001020
```

This invention relates to the discovery of nucleic acids associated with cell AB proliferation, neoplasia, cell transformation, malignant tumor formation and metastasis and uses therefor. The present invention provides a method for cancer diagnosing by detecting the overexpression or the underexpression of a cancer-associated mRNA in the tissue of interest, preferably in liver, breast, prostate, kidney and colon. In another aspect, the invention provides methods for arresting cancer and a method for identifying a modulators of cancer development.

ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: DOCUMENT NUMBER:

2001142585 MEDLINE PubMed ID: 11085876

TITLE:

Multiple subcellular localizations of PCTAIRE-

1 in brain.

Le Bouffant F; Le Minter P; Traiffort E; Ruat M; Sladeczek

CORPORATE SOURCE:

CNRS UPR 2212, Institut Alfred Fessard, Gif-sur-Yvette,

France

SOURCE:

Molecular and cellular neurosciences, (2000 Oct) 16 (4)

388-95.

Journal code: 9100095. ISSN: 1044-7431.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200103

ENTRY DATE:

Entered STN: 20010404

Last Updated on STN: 20020420 Entered Medline: 20010308

AR We developed a selective antibody to a synthetic peptide corresponding to an N-terminal sequence of the PCTAIRE-1 protein. In rodent brain extracts it recognized only the protein doublet characteristic of PCTAIRE-1, and this signal is completely abolished by preincubation of the antibody with the immunopeptide. Immunolabeling experiments done with this PCTAIRE -1-specific antibody reveal that the protein is widely distributed in the rodent brain as are the mRNAs visualized using an antisense riboprobe corresponding to the entire PCTAIRE-

1 open reading frame. Two types of PCTAIRE-1 protein localizations were observed: first a diffuse labeling of almost all brain regions, particularly intense in the molecular layer of the cerebellum and the mossy fiber region of the hippocampus, and second a spot-like localization in the nuclei of large neurons such as cerebellar Purkinje cells and pyramidal cells of the hippocampus. Colocalization with the B23 protein allows one to identify these compartments as nucleoli. Our results suggest a nucleolar function of PCTAIRE-1 in large neurons and a role in regions containing important granule cell projections.

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NEWS 5 May 12 EXTEND option available in structure searching

NEWS 6 May 12 Polymer links for the POLYLINK command completed in REGISTRY

NEWS 7 May 17 FRFULL now available on STN

NEWS 8 May 27 New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus

NEWS 9 May 27 CAplus super roles and document types searchable in REGISTRY

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NEWS 11 Jun 22 STN Patent Forums to be held July 19-22, 2004

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004

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FULL ESTIMATED COST

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genes that are overexpressed during the first 24 h and level off thereafter, whereas other genes are maximally expressed at 96 h of treatment. The results obtained in this study demonstrated that genes regulating cell proliferation, apoptosis, cell trafficking, and DNA repair are significantly affected by hCG in human breast cancer cells in vitro.

REFERENCE COUNT: 113 THERE ARE 113 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 2 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

139:363045 CA

TITLE:

Genes expressed in atherosclerotic tissue and their

use in diagnosis and pharmacogenetics

INVENTOR(S):

Nevins, Joseph; West, Mike; Goldschmidt, Pascal

PATENT ASSIGNEE(S): SOURCE:

Duke University, USA PCT Int. Appl., 408 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

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PATENT NO.
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                      A2
                             20031106
                                            WO 2002-US38221 20021112
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PRIORITY APPLN. INFO.:
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                                                              20021025
                                         US 2002-424680P
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                                                              20021108
                                         WO 2002-US38221 A 20021112
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AB Genes whose expression is correlated with an determinant of an atherosclerotic phenotype are provided. Also provided are methods of

using the subject atherosclerotic determinant genes in diagnosis and treatment methods, as well as drug screening methods. In addition, reagents and kits thereof that find use in practicing the subject methods are provided. Also provided are methods of determining whether a gene is correlated

with a disease phenotype, where correlation is determined using a Bayesian anal.

ANSWER 3 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

138:380512 CA

TITLE:

Systems and methods for characterizing a biological condition or agent using calibrated gene expression

profiles

INVENTOR(S):

Bevilacqua, Michael; Cheronis, John C.; Tryon, Victor

Source Precision Medicine, Inc., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 156 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                 KIND DATE
                                       APPLICATION NO. DATE
                                       WO 2002-US36084 20021108
    WO 2003040404 A1 20030515
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                                      US 2001-340881P P
                                                          20011207
                                      US 2002-369633P P
                                                          20020403
                                      US 2002-376997P P 20020430
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A method provides an index that is indicative of the state of a subject, AΒ as to a biol. condition, based on a sample from the subject. An embodiment of this method includes: deriving from the sample a profile data set, the profile data set including a plurality of members, each member being a quant. measure of the amount of a distinct RNA or protein constituent in a panel of constituents selected so that measurement of the constituents enables evaluation of the biol. condition; and in deriving the profile data set, achieving such measure for each constituent under measurement conditions that are substantially repeatable; and applying values from the profile data set to an index function that provides a mapping from an instance of a profile data set into a single-valued measure of biol. condition, so as to produce an index pertinent to the biol. condition of the subject. The index was determined with resp. to a relevant population which has in common property that is at least one of age group, gender, ethnicity, geog. location, diet, medical disorder, clin. indicator, medication, phys. activity, body mass, and environmental exposure. The biol. conditions include inflammation, diabetes, prostate health or disease, manifested skin, liver metabolism and disease, vascular disease, abnormal cell development, cancer and infectious disease. The method can be used for evaluating the effect on a biol. condition by drugs. 8

ANSWER 4 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

TITLE:

138:148639 CA Comparison of protein or gene expression patterns of blood cells obtained by microarray to injury database

to assess injury

INVENTOR(S):

Sharp, Frank R.; Tang, Yang; Lu, Aigang

University of Cincinnati, USA

PCT Int. Appl., 126 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

SOURCE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

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APPLICATION NO. DATE
    PATENT NO.
                 KIND DATE
                                        WO 2001-US44278 20011128
    WO 2003008647
                    A2
                           20030130
                    A3
                           20040325
    WO 2003008647
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            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                        US 2001-996275 20011128
                     A1
                           20030605
    US 2003104393
                                        EP 2001-988189
                      A2
                           20040609
                                                          20011128
    EP 1425412
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                       US 2000-253568P P 20001128
PRIORITY APPLN. INFO.:
                                       WO 2001-US44278 W 20011128
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Methods of injury assessment in an individual include the steps of determining AB

pattern of expression exhibited by blood cells obtained from an individual and comparing the pattern of expression exhibited by the obtained blood cells to an injury database to assess the injury. The injury database includes genomic injury databases, proteomic injury databases, organ specific injury database, disease specific injury database. The patterns of gene or protein expression are obtained by microarray and analyzed by statistical anal., class prediction, clustering, and computer programs. The genes in the pattern of gene expression comprise acidosis-induced genes, hypoxia-induced genes, glucose-induced genes, ischemia-induced genes. The invention relates to sequences of two human genes which are expressed more highly in Parkinson's individuals. The invention also relates to genes associated with status epilepticus, hypoglycemia, ischemic stroke and hemorrhagic stroke in rat model. The invention also relates to gene expression pattern in males and females, resp. The invention also relates to assessing Parkinson's disease, stroke profusion, drug, neurofibromatosis, manic bipolar depression, migraine headache, schizophrenia, and Tourettes disease based on pattern of expression.

ANSWER 5 OF 17 CA COPYRIGHT 2004 ACS on STN 139:394734 CA

ACCESSION NUMBER:

TITLE:

Analysis of protein induction in the CNS of SJL mice

with experimental allergic encephalomyelitis by proteomic screening and immunohistochemistry

Duzhak, T.; Emerson, M. R.; Chakrabarty, A.; Alterman, AUTHOR (S):

M. A.; Levine, S. M.

CORPORATE SOURCE:

Biochemical Research Service Laboratory, University of

Kansas, Lawrence, KS, 66045, USA

Cellular and Molecular Biology (Paris, France, Print)

(2003), 49(5), 723-732 CODEN: CMOBEF; ISSN: 0145-5680

PUBLISHER:

CMB Association

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

Exptl. allergic encephalomyelitis (EAE) is an autoimmune disease characterized by demyelination and inflammatory infiltrates in the CNS, and it is an animal model of multiple sclerosis. Piperonyl butoxide (PBO) suppresses disease in EAE mice, and it exhibits a dual effect on cytochrome P450s that manifests in a transient inhibitory phase followed by induction. In order to identify the expression of proteins associated with EAE, a proteomic screening was performed on hindbrain microsomes from control + vehicle, control + PBO, EAE + vehicle, and EAE + PBO female mice. Glucose regulated protein 94 (Grp94) and coagulation factor VIII were among the proteins identified in EAE + vehicle and EAE + PBO mice. Immunohistochem. staining of Grp94 was present in some neurons and oligodendrocytes in hindbrain sections from control animals, and in some cells within inflammatory infiltrates in EAE animals. Since Grp94 (also known as Gp96) can partake in antigen presentation and induction of proinflammatory cytokine expression, its presence in these cells suggests that it may play a role in the pathogenesis of EAE. Coaqulation factor VIII is carried and protected by von Willebrand factor. Immunohistochem. staining of von Willebrand factor revealed its presence in some vessels within hindbrain sections from control animals. In EAE animals, the number of labeled vessels was significantly increased, and extracellular granular deposits were observed around labeled vessels indicating that the breakdown of the blood-brain barrier that occurs in EAE permitted its extravasation into the CNS: Addnl. proteins were identified in the different groups of mice by proteomic screening, but confirmation of their expression profile awaits investigations by independent measures.

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS 38 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

138:383243 CA

TITLE:

Effects of Al adenosine receptor overexpression on

normoxic and post-ischemic gene expression

AUTHOR (S):

SOURCE:

Ashton, Kevin J.; Holmgren, Kirsty; Peart, Jason;

Lankford, Amy R.; Paul Matherne, G.; Grimmond, Sean;

Headrick, John P.

CORPORATE SOURCE:

Heart Foundation Research Centre, Griffith University

Gold Coast Campus, Southport, 4217, Australia Cardiovascular Research (2003), 57(3), 715-726

CODEN: CVREAU; ISSN: 0008-6363

Elsevier Science B.V. PUBLISHER:

DOCUMENT TYPE:

LANGUAGE:

Journal English

Objectives: To identify potential mol. genetic determinants of cardiovascular ischemic tolerance in wild-type and transqenic hearts overexpressing Al adenosine receptors (AlARs). Methods: cDNA microarrays were used to explore expression of 1824 genes in wild-type hearts and ischemia-tolerant mouse hearts overexpressing AlARs. Results: Overexpression of AlARs reduced post-ischemic contractile dysfunction, limited arrhythmogenesis, and reduced necrosis by .apprx.80% in hearts subjected to 30 min global ischemia 60 min reperfusion. Cardioprotection was abrogated by acute AlAR antagonism, and only a small number (19) of genes were modified by AlAR overexpression in normoxic hearts. Ischemia-reperfusion significantly altered expression of 75 genes in wild-type hearts (14 induced, 61 down-regulated), including genes for metabolic enzymes, structural/motility proteins, cell signaling proteins, defense/growth proteins, and regulators of transcription and translation.

AlaR overexpression reversed the majority of gene down-regulation whereas gene induction was generally unaltered. Addnl., genes involved in cell defense, signaling and gene expression were selectively modified by ischemia in transgenic hearts (33 induced, 10 down-regulated), possibly contributing to the protected phenotype. Real-time PCR verified changes in nine selected genes, revealing concordance with array data. Transcription of the A1AR gene was also modestly reduced post-ischemia, consistent with impaired functional sensitivity to AIAR stimulation. Conclusions: Data are presented regarding the early post-ischemic gene profile of intact heart. Reduced A1AR transcription is observed which may contribute to poor outcome from ischemia. A1AR overexpression selectively modifies post-ischemic gene expression, potentially contributing to ischemic-tolerance.

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

137:180730 CA

TITLE:

Human cDNA/DNA molecules and proteins encoded by them with enhanced expression in apoptosis-resistant cell clones, and use thereof in diagnosis, therapeutics and

drug screening

INVENTOR (S):

Ullrich, Axel; Abraham, Reimar

PATENT ASSIGNEE(S):

Max-Planck-Gesellschaft zur Foerderung der

Wissenschaften e.V., Germany

SOURCE:

PCT Int. Appl., 56 pp. CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                        KIND DATE
                                                        APPLICATION NO. DATE
                            ____
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                                                         _____
      WO 2002063037
                             A2
                                                         WO 2002-EP1073
                                     20020815
                                                                                20020201
      WO 2002063037
                             A3
                                     20031002
                            C2
      WO 2002063037
                                     20040219
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
                PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
                 TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
                 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                    20031126
                                                        EP 2002-718083 20020201
                             A2
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      JP 2004517638
                             T2
                                     20040617
                                                         JP 2002-562773
                                                                                20020201
      US 2004110177
                              A1
                                     20040610
                                                         US 2003-470845
                                                                                20030731
PRIORITY APPLN. INFO.:
                                                     US 2001-265631P P
                                                                                20010202
                                                                          W 20020201
                                                     WO 2002-EP1073
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The present invention relates to a method for identifying nucleic acid AR mols. functionally associated with a desired phenotype, such as cancer cell properties, including anti-apoptosis. The method, which allows for generation of expression profiles of genes associated with said desired phenotype, involves a mutagenesis and/or genome rearrangement step, followed by selection of cell clones displaying the desired phenotype. The invention also relates that the method involves the use of the following techniques: fluorescence-activated cell sorting (FACS); nucleic acid microarray (cDNA, genomic or oligonucleotide); protein array;

two-dimensional gel electrophoresis; and/or mass spectrometry. invention further relates that the disclosed method was used to identify genes, which are differentially expressed in apoptosis-sensitive and apoptosis-resistant cells. Specifically, the invention relates that apoptosis was induced in human cervix carcinoma cell line HeLa S3 by Fas activation. After the selection procedure, only a low number of living cells were present, which had a higher resistance against apoptosis than the parental cell line. MRNA was isolated from these surviving clones, and from the parental cell line, and transcribed into cDNA. CDNA microarray technol. was used to identify about 150-200 genes (cDNA/DNA mols.) that exhibited enhanced expression in apoptosis-resistant clones. The GenBank accession nos. of some of these cDNA/DNA mols. are provided, along with the products encoded by said mols. Still further, the invention relates that most of the apoptosis-associated genes encode protein phosphatases, and kinases. Finally, the invention relates that said nucleic acid mols., and proteins encoded by mols., can be used as targets in diagnosis, therapeutics and drug screening, particularly for disorders associated with dysfunction of apoptotic processes, such as tumors.

ANSWER 8 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

138:20443 CA

TITLE:

Endocrine disruptor screening using DNA chips of

endocrine disruptor-responsive genes

INVENTOR(S):

Kondo, Akihiro; Takeda, Takeshi; Mizutani, Shigetoshi;

Tsujimoto, Yoshimasa; Takashima, Ryokichi; Enoki,

Yuki; Kato, Ikunoshin

PATENT ASSIGNEE(S): SOURCE:

Takara Bio Inc., Japan Jpn. Kokai Tokkyo Koho, 386 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION N	o.	DATE
<b></b>						
JP 2002355079	A2	20021210		JP 2002-69354		20020313
PRIORITY APPLN. INFO.	:		JP	2001-73183	Α	20010314
			JP	2001-74993	A	20010315
			JР	2001-102519	Α	20010330

A method and kit for detecting endocrine-disrupting chems. using DNA AB microarrays are claimed. The method comprises preparing a nucleic acid sample containing mRNAs or cDNAs originating in cells, tissues, or organisms which have been brought into contact with a sample containing the endocrine disruptor. The nucleic acid sample is hybridized with DNA microarrays having genes affected by the endocrine disruptor or DNA fragments originating in these genes have been fixed. The results obtained are then compared with the results obtained with the control sample to select the gene affected by the endocrine disruptor. Genes whose expression is altered by tri-Bu tin, 4-octaphenol, 4-nonylphenol, di-N-Bu phthalate, dichlorohexyl phthalate, octachlorostyrene, benzophenone, diethylhexyl phthalate, diethylstilbestrol (DES), and 17- $\beta$  estradiol (E2), were found in mice by DNA chip anal.

ANSWER 9 OF 17 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2002476045 MEDLINE DOCUMENT NUMBER: PubMed ID: 12154078

TITLE:

Regulation of the CDK-related protein kinase

PCTAIRE-1 and its possible role in neurite outgrowth in Neuro-2A cells.

AUTHOR: Graeser Ralph; Gannon Julian; Poon Randy Y C; Dubois

Thierry; Aitken Alastair; Hunt Tim

ICRF Clare Hall Laboratories, South Mimms, Herts EN6 3LD, CORPORATE SOURCE:

UK.. r.graeser@proqinase.com

Journal of cell science, (2002 Sep 1) 115 (Pt 17) 3479-90. SOURCE:

Journal code: 0052457. ISSN: 0021-9533.

England: United Kingdom PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

FILE SEGMENT: Priority Journals

200304 ENTRY MONTH:

Entered STN: 20020920 ENTRY DATE:

Last Updated on STN: 20030417 Entered Medline: 20030416

AB PCTAIRE-1 is a CDK-related protein kinase found in terminally differentiated cells in brain and testis, and in many immortalised and transformed cell lines. Bacterially expressed PCTAIRE is completely inactive as a protein kinase, but is a very good substrate for protein kinase A (PKA), which phosphorylates a total of four sites in the N-terminus of PCTAIRE-1. Phosphorylation of one of these sites, Ser119, generates a 14-3-3 binding site, which is functional in vitro as well as in vivo. Mutation of another PKA site, Ser153, to an alanine residue generated an activated kinase in transfected mammalian This activity was comparable to that of CDK5 activated by a bacterially expressed, truncated version of p35(nck), p21. Gel filtration analysis of a brain extract suggested that monomeric PCTAIRE-1 was the active species, implying that PCTAIRE-1 may not be a true CDK, in that it does not require a partner (cyclin-like) subunit for kinase activity. Finally, we found that various forms of PCTAIRE-1 transfected into neuroblastoma cell lines could either promote or inhibit neurite outgrowth, suggesting a potential role for the PCTAIRE-1 gene product in the control of neurite outgrowth.

ANSWER 10 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 137:77764 CA

TITLE: Gene expression in bronchoalveolar lavage cells from

scleroderma patients

Luzina, Irina G.; Atamas, Sergei P.; Wise, Robert; AUTHOR (S):

> Wigley, Fredrick M.; Xiao, Hui Qing; White, Barbara Research Service, Veterans Affairs Maryland Health Care System and Department of Medicine, University of

Maryland School of Medicine, Baltimore, MD, USA American Journal of Respiratory Cell and Molecular

Biology (2002), 26(5), 549-557 CODEN: AJRBEL; ISSN: 1044-1549

PUBLISHER: American Thoracic Society

DOCUMENT TYPE: Journal

CORPORATE SOURCE:

SOURCE:

LANGUAGE: English The hypothesis of this study is that activation of cell-mediated immunity with associated macrophage activation occurs in the lungs of scleroderma patients with lung inflammation. Gene expression profiles were determined in bronchoalveolar lavage (BAL) cells from scleroderma patients with and without lung inflammation and control subjects, using DNA array technol. ELISA was used to measure proteins in BAL fluids. Gene expression profiles were similar in BAL cells from patients without lung inflammation and control subjects. Gene expression profiles in patients with lung inflammation showed increased expression of chemokines and chemokine receptor genes, which would lead to migration of T cells, especially type 2 T cells, and phagocytic cells. Protein levels of pulmonary and activated-response chemokine and monocyte chemoattractant protein-1 were elevated. Other changes in gene expression suggested alterations in gene transcription, cell cycle control, vesicle transport, antigen-presenting function, and intracellular signaling. Two anti-inflammatory cytokines, interleukin-1 receptor antagonist and transforming growth factor-β1, had increased expression, consistent with other human fibrotic lung

diseases and animal models of lung fibrosis. These findings suggest recruitment of T cells and chronic macrophage activation in scleroderma patients at greater risk for lung fibrosis, but differ from typical delayed-type hypersensitivity responses, without prominence of type 1 T cells and inflammatory cytokines.

REFERENCE COUNT:

35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

135:15154 CA

CODEN: PIXXD2

TITLE:

Single nucleotide polymorphisms in coding regions of

human genes and primers/probes and methods for

detection thereof

INVENTOR(S):

Cargill, Michele; Ireland, James S.; Lander, Eric S. Whitehead Institute for Biomedical Research, USA

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 80 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. \_\_\_\_\_ WO 2001038576 A2 20010531 WO 2000-US31639 20001117 A3 20020711 WO 2001038576 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1999-167334P P 19991124

The invention provides nucleic acid segments of the human genome, AB particularly nucleic acid segments from the coding region of a gene, including polymorphic sites. Allele-specific primers and probes hybridizing to regions flanking or containing these sites are also provided. The nucleic acids, primers and probes are used in applications such as phenotype correlations, forensics, paternity testing, medicine and genetic anal. Thus, total 588 SNPs were identified in 212 genes relevant to cancer, inflammation, heart diseases, cardiovascular diseases and microorganisms by sequencing of target sequences from individuals of diverse ethnic and geog. backgrounds by hybridization to probes immobilized to microfabricated arrays.

ANSWER 12 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

134:337386 CA

TITLE:

Glutamate transporter associated proteins regulating glutamate transport, cytoskeletal organization and

chloride flux

INVENTOR(S):

Rothstein, Jeffrey D.; Jackson, Mandy; Lin, Glen; Law,

Robert; Orlov, Irina

PATENT ASSIGNEE(S):

Johns Hopkins University School of Medicine, USA

SOURCE:

PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                       KIND DATE
                                               APPLICATION NO. DATE
     ______
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                                                                     _ _ _ _ _ _ _
     WO 2001030968 A2 20010503
                                                 WO 2000-US29431 20001023
                        A3 20020808
     WO 2001030968
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
               HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
               LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
               SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
               YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
               DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
               CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               AU 2001-11037 20001023
     AU 2001011037
                        A5 20010508
                                              US 1999-161007P P 19991023
PRIORITY APPLN. INFO.:
                                              US 2000-206157P P 20000522
                                             WO 2000-US29431 W 20001023
     Glutamate transporter-associated proteins (GTRAP) and cDNAs encoding them are
AB
     provided. Also provided is a method for identifying a compound that
     modulates a cellular response mediated by a GTRAP. A method is further
     provided for identifying a compound that inhibits an interaction
     between a GTRAP and a glutamate transporter protein. A method is provided
     for treating a disorder associated with glutamate transport. The proteins
     were first identified as interacting with the EAAC1 glutamate transporter
     in a yeast two-hybrid system. Full-length cDNAs encoding three different
     GTRAPs (3-18, 4-41, and 4-48) were obtained. Each of these proteins bound
     a different glutamate transporter and the transporter-binding domains are
     identified. Tissue distribution of the GTRAPs mirrored the pattern of
     distribution of their cognate transporters. GTRAP3-18 was distributed in
     a number of major organs while 4-41 and 4-48 were localized to the brain.
     Antisense DNAs from the GTRAP3-18 blocked synthesis of the protein in
     rats. Synthesis of GTRAP3-18 was also inhibited by retinoic
     acid.
     ANSWER 13 OF 17 CA COPYRIGHT 2004 ACS on STN
                             134:339179 CA
ACCESSION NUMBER:
                             Nucleic acids and proteins associated with cancer as
TITLE:
                             antitumor targets
                             Burmer, Glenna C.; Brown, Joseph P.; Pritchard, David
INVENTOR(S):
                             Lifespan Biosciences, Inc., USA
PATENT ASSIGNEE(S):
                             PCT Int. Appl., 98 pp.
SOURCE:
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                     KIND DATE
                                                 APPLICATION NO.
     PATENT NO.
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                               ______
                                                 _____
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     WO 2001030964 A2 20010503
WO 2001030964 A3 20010809
                                                 WO 2000-US29126 20001020
                                20010503
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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AU 2001-13397

US 1999-161232P P 19991022

US 2000-693783 A 20001019

20001020

A5 20010508

AU 2001013397

PRIORITY APPLN. INFO.:

## WO 2000-US29126 W 20001020

AB This invention relates to the discovery of nucleic acids associated with cell proliferation, neoplasia, cell transformation, malignant tumor formation and metastasis and uses therefor. The present invention provides a method for cancer diagnosing by detecting the overexpression or the underexpression of a cancer-associated mRNA in the tissue of interest, preferably in liver, breast, prostate, kidney and colon. In another aspect, the invention provides methods for arresting cancer and a method for identifying a modulators of cancer development.

L4 ANSWER 14 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

136:319709 CA

TITLE:

Transcriptional profiling reveals global defects in energy metabolism, lipoprotein, and bile acid synthesis and transport with reversal by leptin

treatment in Ob/ob mouse liver

AUTHOR(S):

Liang, Chien-Ping; Tall, Alan R.

CORPORATE SOURCE:

Division of Molecular Medicine, Department of

Medicine, Columbia University, New York, NY, 10032,

USA

SOURCE:

Journal of Biological Chemistry (2001), 276(52),

49066-49076

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER:

American Society for Biochemistry and Molecular

Biology

DOCUMENT TYPE: LANGUAGE: Journal English

Leptin, a hormone secreted by adipose tissue, has been shown to have a major influence on hepatic lipid and lipoprotein metabolism To characterize changes in lipid and lipoprotein gene expression in mouse liver, suppression subtractive hybridization and cDNA microarray anal. were used to identify mRNAs differentially expressed after leptin treatment of ob/ob mice. Ob/ob mice showed a profound decrease in mRNAs encoding genes controlling bile acid synthesis and transport as well as a variety of apolipoprotein genes and hepatic lipase with reversal upon leptin administration, suggesting that leptin coordinately regulates high d. lipoprotein and bile salt metabolism Leptin administration also resulted in decreased expression of genes involved in fatty acid and cholesterol synthesis, glycolysis, gluconeogenesis, and urea synthesis, and increased expression of genes mediating fatty acid oxidation, ATP synthesis, and oxidant defenses. The changes in mRNA expression are consistent with a switch in energy metabolism from glucose utilization and fatty acid synthesis to fatty acid oxidation and increased respiration. The latter changes may produce oxidant stress, explaining the unexpected finding that leptin induces a battery of genes involved in antioxidant defenses. Expression cluster anal. revealed responses of several sets of genes that were kinetically linked. Thus, the mRNA levels of genes involved in fatty acid and cholesterol synthesis are rapidly (<1 h) repressed by leptin administration, in association with an acute decrease in plasma insulin levels and decreased sterol regulator element-binding protein-1 expression. In contrast, genes participating in fatty acid oxidation and ketogenesis were induced more slowly (24 h), following an increase in expression of their common regulatory factor, peroxisome proliferator-activated receptor However, the regulation of genes involved in high d. lipoprotein and bile salt metabolism shows complex kinetics and is likely to be mediated by novel transcription factors.

REFERENCE COUNT:

56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 17 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

134:173245 CA

TITLE:

Gene expression profile of the aging process in rat liver: normalizing effects of growth hormone

replacement

Tollet-Egnell, Petra; Flores-Morales, Amilcar; AUTHOR(S):

Stahlberg, Nina; Malek, Renae L.; Lee, Norman;

Norstedt, Gunnar

Department of Molecular Medicine Karolinska CORPORATE SOURCE:

Institutet, Karolinska Hospital, Stockholm, 171 76,

Swed.

Molecular Endocrinology (2001), 15(2), 308-318 SOURCE:

CODEN: MOENEN; ISSN: 0888-8809

Endocrine Society PUBLISHER:

DOCUMENT TYPE:

Journal English LANGUAGE:

The mechanisms that control life span and age-related phenotypes are not well understood. It has been suggested that aging or at least some of its symptoms are related to a physiol. decline in GH levels with age. To test this hypothesis, and to improve the authors' understanding of the cellular and mol. mechanisms behind the aging process, the authors have analyzed age-induced changes in gene expression patterns through the application of DNA chip technol. In the present study, the aging process was analyzed in rat liver in the presence or absence of GH replacement. Out of 3000 genes printed on the microarrays, approx. 1000 were detected in the rat liver. Among these, 47 unique transcripts were affected by the aging process in male rat livers. The largest groups of age-regulated transcripts encoded proteins involved in intermediary metabolism, mitochondrial respiration, and drug metabolism Approx. 40% of the differentially expressed gene products were normalized after GH treatment. The majority of those transcripts have previously not been shown to be under GH control. The list of gene products that showed normalized expression levels in GH-treated old rats may shed further insight on the action and mechanism behind the pos. effects of GH on, for example, fuel metabolism and body composition observed in different animal and human studies.

REFERENCE COUNT:

THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS 8.0 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER:

135:56831 CA

TITLE:

Identification of differentially expressed genes in

human gliomas by DNA microarray and tissue chip

techniques

AUTHOR (S):

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Cancer Research (2000), 60(23), 6617-6622

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PUBLISHER:

American Association for Cancer Research

Journal

DOCUMENT TYPE: English LANGUAGE:

New genomic large-scale screening techniques have made the task of establishing an accurate mol. fingerprint of cancer cells feasible. we have used a two-phase strategy for identification of mol. alterations in gliomas. First, cDNA microarrays (Clontech Labs., Inc., Research Genetics) were used to pinpoint differentially expressed genes between normal brain and diffuse astrocytomas (grades II-IV), and between a primary tumor and a later tumor reoccurrence in the same patient. More than 200 gene expression alterations were detected from glioblastomas, whereas relatively few changes were seen in grade II and grade III tumors. The most distinct progression-related expression change was the up-regulation of the insulin-like growth factor binding protein 2 (IGFBP2) gene. Second, a high-d. tissue microarray of 418 brain tumors was constructed and used for clin. validation of gene expression changes.

Strong expression of IGFBP2 was associated with progression and poor patient survival in diffuse astrocytomas (P < 0.0001). Third, comparisons of the data between (a) multiple spots retrieved from one predefined tumor region (IGFBP2 and vimentin immunohistochem., 20 tumors) or between (b) standard slides and arrayed tissues (p53 immunohistochem., 42 tumors) revealed very little variation. In conclusion, the combined use of DNA microarrays and tissue microarrays offers a powerful strategy for rapid identification and thorough characterization of differentially expressed genes in gliomas.

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DUPLICATE 2

ACCESSION NUMBER:

2000123791 EMBASE

13

TITLE:

Identification of tudor repeat associator with PCTAIRE 2 (Trap). A novel protein that interacts with the N-terminal

domain of PCTAIRE 2 in rat brain.

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ISSN: 0014-2956 CODEN: EJBCAI

COUNTRY:

United Kingdom

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029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

PCTAIRE 2 is a Cdc2-related kinase that is predominantly expressed in the AΒ terminally differentiated neuron. To elucidate the function of PCTAIRE 2, proteins that associate with PCTAIRE 2 were screened by the yeast two-hybrid system. A positive clone was found to encode a novel protein that could bind to PCTAIRE 2 in vitro as well as in vivo, and was designated as Trap (tudor repeat associator with PCTA1RE 2). The overall structure of Trap shows no significant homology to any proteins, but contains five repeated domains (the tudor-like domain), conserved in Drosophila tudor protein. Trap associates with the N-terminal domain of PCTAIRE 2 through its C-terminal domain, which contains two tudor-like domains. PCTAIRE 1, but not PCTAIRE 3, can also associate with Trap. Trap is predominantly expressed in brain and testis, and gradually increases during brain development throughout life, consistent with the expression pattern of PCTAIRE 2. Immunoreactivities for PCTAIRE 2 and Trap were colocalized to the mitochondria in COS 7 cells. Immunohistochemical analyses showed that PCTAIRE 2 and Trap were distributed in the same cell layer of the cerebral cortex and cerebellum. These findings suggest that Trap is a physiological partner of PCTAIRE 2 in terminally differentiated neurons.